

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Claims**

1. (Withdrawn) A system for displaying securities market transaction information received from a securities exchange market data system comprising:

an exchange server operatively coupled to the securities exchange market data system and adapted to receive therefrom transaction information and order book information relating to at least one security, said transaction information including price and volume of at least one trade in said security; and

a trader workstation operatively coupled to said exchange server;

said exchange server being further adapted to transmit to said trader workstation a selectable portion of said transaction information and order book information relating to said at least one security;

said trader workstation being adapted to display for each trade of a user-selected security within a user-selected range of trades represented in said transaction information an indicium representing said price of such trade;

said trader workstation being adapted to determine responsive to said transaction information and said order book information whether said trade was seller-initiated or buyer-initiated, and responsive to said determination to control appearance of said indicia to distinguish between buyer-initiated and seller-initiated trades; and

said trader workstation being adapted to display at least a subset of said order book information relating to said user-selected security adjacent said indicia.

2. (Withdrawn) The system of claim 1 wherein said trader workstation is further adapted to group said trades into one or more auction events, the trades in each auction event being related to one another as determined by user-selectable criteria, and wherein for each of said auction events, said indicia corresponding to all trades grouped into such auction event are displayed adjacently.

3. (Withdrawn) The system of claim 2 wherein said trader workstation is further adapted to display an indicium identifying the beginning of each auction event of which a displayed trader is a member.

4. (Withdrawn) The system of claim 3 wherein said trader workstation is further adapted to compare transaction information regarding each trade of said user-selected security to user-specified criteria and provide a sound cue corresponding to trades satisfying said criteria.

5. (Currently Amended) A method for use with a trader workstation for displaying securities market transaction information comprising the steps of:

a. receiving transaction information regarding a selected security, said information including price of at least one trade;

b. receiving order book information regarding open orders for a selected security;

c. determining responsive to said transaction information and said order book information whether each of a user-selected range of trades represented in said transaction information was seller-initiated or buyer-initiated;

d. displaying for each trade of a user-selected security within said user-selected range of transactions represented in said transaction information an indicium representing said price of such trade, said indicium having an appearance distinguishing between buyer-initiated and seller-initiated trades; and

e. displaying at least a subset of said order book information relating to said user-selected security adjacent said indicia.

6. (Currently Amended) The method of claim 5 wherein said step d. thereof further comprises the step of:

displaying said trades in a two-dimensional chart having a first axis representing trade price and a second axis being substantially perpendicular to the first axis and representing time.

7. (Original) The method of claim 5 further comprising the step of:  
grouping said trades into one or more auction events, the trades in each auction event being related to one another as determined by user-selectable criteria;  
and wherein said step d. thereof further comprises the step of:  
displaying said trades in a two-dimensional chart having a first axis representing trade price and a second axis representing time of initiation of an auction event.
8. (Currently Amended) The method of claim 6, wherein said order book information includes at least one proposed transaction price, and said step e. thereof further comprises the step of:  
displaying at least a subset of said order book information adjacent ~~said~~ a first axis such that said at least one proposed transaction price is aligned with a position corresponding to said proposed transaction price on said first axis.
9. (Withdrawn) A method for use with a trader workstation for displaying securities market transaction information comprising the steps of:  
receiving transaction information regarding a selected security, said information including price of a plurality of trades;  
receiving order book information regarding a selected security;  
determining responsive to said transaction information and said order book information whether each of a user-selected range of trades represented in said transaction information was seller-initiated or buyer-initiated;  
grouping said trades into one or more auction events, the trades in each auction event being related to one another as determined by user-selectable criteria;  
displaying for each trade of a user-selected security within said user-selected range of transactions represented in said transaction information an indicium representing said price of such trade, said indicium having an appearance distinguishing between buyer-initiated and seller-initiated trades, wherein for each of said auction events, the indicia corresponding to all trades grouped into such auction event are displayed adjacently; and  
displaying an indicium identifying the beginning of each auction event of which a displayed trade is a member.

10. (Withdrawn) The method of claim 9, further comprising the step of determining, for each of said auctions, a trend status value describing the trades of such auction, said trend status value being responsive to whether volume of said trades determined to be seller-initiated exceeds volume of said trades determined to be buyer-initiated.

11. (Withdrawn) The method of claim 9, comprising the step of determining, for each of said auctions, a trend status value describing the trades of such auction, said trend status value being responsive to a comparison between a bid price of said selected security and a volume-weighted average price of the trades of such auction.

12.-14. (Canceled)

15. (Withdrawn) A method for use with a trader workstation for providing securities market transaction information to a trader comprising the steps of:

- receiving transaction information regarding a selected security, said information including price of a plurality of trades;

- receiving order book information regarding a selected security;

- determining responsive to said transaction information and said order book information whether each of a user-selected range of trades represented in said transaction information was seller-initiated or buyer-initiated;

- displaying for each trade of a user-selected security within said user-selected range of transactions represented in said transaction information an indicium representing said price of such trade, said indicium having an appearance distinguishing between buyer-initiated and seller-initiated trades; and

- comparing transaction information regarding each trade of said user-selected security to user-specified criteria and providing a sound cue corresponding to trades satisfying said criteria.

16. (Withdrawn) The method of claim 15 further comprising the steps of:

- grouping said trades into one or more auction events, the trades in each auction event being related to one another as determined by user-selectable criteria; and

- providing a sound cue corresponding to initiation of a new auction event.

17.-31. (Canceled)

32. (Withdrawn) The system of claim 1 wherein said trader workstation is adapted to receive said transaction information as part of a universal data structure including price, volume and time of said at least one trade.

33. (Withdrawn) The system of claim 1 wherein said trader workstation is adapted to receive said order book information as part of a universal data structure including at least one bid price and a respective quantity of units sought to be purchased at each of such bid prices, and at least one offer price and a respective quantity of units sought to be sold at each of said offer prices.

34. (Withdrawn) The system of claim 1 further wherein said trader workstation is adapted to receive a universal data structure including, for said at least one security: a lowest trade price observed for said security during a current trading day; a highest trade price observed for said security during the current trading day; a change in price observed since the current trading day began.

35. (Withdrawn) The method of claim 5, wherein said step of receiving transaction information further comprises:

receiving said transaction information as part of a universal data structure including price, volume and time of said at least one trade.

36. (Previously Presented) The method of claim 5, wherein said step of receiving order book information further comprises:

receiving said order book information as part of a universal data structure including at least one bid price and a respective quantity of units sought to be purchased at each of such bid prices, and at least one offer price and a respective quantity of units sought to be sold at each of such offer prices.

37. (Previously Presented) The method of claim 5, further comprising:

receiving a universal data structure including, for said at least one security: a lowest trade price observed for said security during a current trading day; a highest trade price observed for said security during the current trading day; a change in price observed since the current trading day began.

38. (Previously Presented) The method of claim 5, wherein said steps of receiving transaction information and receiving order book information further comprise:

receiving said transaction information and order book information regarding said selected security from an exchange server operatively coupled to a market data system of a securities exchange using a universal data structure for data from all exchanges and for all products traded.

39. (Withdrawn) The method of claim 7, wherein said order book information includes at least one proposed transaction price, and said step e. thereof further comprises the step of:

displaying at least a subset of said order book information adjacent said first axis such that said at least one proposed transaction price is aligned with a position corresponding to said proposed transaction price on said first axis.

40. (Withdrawn) The method of claim 9, further comprising the steps of:

determining, for each of said auctions, a derivative value describing the trades of such auction; and

grouping said auctions into one or more auction sets, the auctions in each auction set being related to one another as determined by a comparison of said derivative values with at least one user-selected criterion.

41. (Withdrawn) The method of claim 9, further comprising the step of determining, for each of said auctions, a trend status value describing the trades of such auction, said trend status value being responsive to a comparison between an offer price of said selected security and a volume-weighted average price of the trades of such auction.

42. (Withdrawn) The method of claim 15, wherein step C thereof further comprises deriving and assigning a buy order attribute to trades executed at or above the most recent lowest ask order price prior to each transaction.

43. (Withdrawn) The method of claim 15, wherein step C thereof further comprises deriving and assigning a sell order attribute to trades executed at or below the most recent highest bid order price prior to each transaction.

44. (Withdrawn) The method of claim 15, wherein step C thereof further comprises deriving and assigning a neutral attribute to trades executed between the most recent lowest ask order price and the most recent highest bid order price prior to each transaction.
45. (Withdrawn) The method of claim 15, further comprising the steps of:  
plotting each trade determined to have originated as a buy order using a first indicia; and  
plotting each trade determined to have originated as a sell order using a second indicia different from said first indicia.
46. (Withdrawn) The method of claim 45, further comprising the step of:  
plotting each trade for which a determination could not be made whether the trade originated as a buy order or a sell order using a third indicia different from said first and second indicia.
47. (Withdrawn) The method of claim 15, further comprising the step of representing at least one trade using indicia of modified appearance responsive to the quantity of such trade.
48. (Withdrawn) The method of claim 15, further comprising the step of accepting a trade order to buy or sell a predetermined quantity of a security, said order being requested by selecting a desired price using a computer pointing device.
49. (Withdrawn) The method of claim 15, further comprising the step of providing a plurality of different sound cues responsive to events matching user-selectable criteria.

50. (New) A method for displaying market transaction information using a trader workstation, the method comprising:

receiving transaction information for a tradable object including price of at least one executed trade for the security;

receiving order book information for open orders for the tradable object, the open orders including at least one bid and at least one offer for the tradable object;

receiving a user-selected range of trades associated with the transaction information;

in response receiving the transaction information and the order book information, determining whether each of the trades in the user-selected range represent seller-initiated or buyer-initiated trades or are not determinable; and

displaying in a two-dimensional chart for each trade in the user-selected range, an indicator representing the trade price where the indicator distinguishes between buyer-initiated trades, seller-initiated trades and non-determinable trades.

51. (New). The method of claim 50 further comprising displaying at least a subset of the order book information associated with the user-selected security.

52. (New) The method of claim 50 where the two-dimensional chart comprises a first axis representing trade price and a second axis being substantially perpendicular to the first axis and representing time of initiation of an auction event.

53. (New) The method of claim 52 further comprising grouping the trades by an auction event, trades in an auction event being related as determined by at least one user-selectable criterion.

54. (New) The method of claim 50, where the order book information comprises a proposed transaction price, and the method further comprises displaying at least a subset of said order book information adjacent a first axis aligning the proposed transaction price with a position corresponding to said proposed transaction price on the first axis.



55. (New) A computer-readable medium having code stored thereon for execution by a processor, the processor carrying out the steps as instructed by the code, the computer-readable medium comprising:

a transaction information module configured to receive executed transaction information for a tradable object including price of at least one executed trade for the security;

an order book information module receiving module configured to receive order book information for open orders for the tradable object, the open orders including at least one bid and at least one offer for the tradable object;

a user-input module configured to receive a user-selected range of trades associated with the transaction information;

a determination module configured to determine whether trades in the user-selected range represent seller-initiated or buyer-initiated trades or are not determinable in response to receiving the transaction information and the order book information; and

a display module configured to display, in a two-dimensional chart for each trade in the user-selected range, an indicator representing the trade price, where the indicator distinguishes between buyer-initiated trades, seller-initiated trades and non-determinable trades.

56. (New). The computer-readable medium of claim 55 comprising a display module configured to display a subset of the order book information associated with the user-selected security.

57. (New) The computer-readable medium of claim 55 where the two-dimensional chart comprises a first axis for trade price and a second axis being substantially perpendicular to the first axis and for time of initiation of an auction event.

58. (New) The computer-readable medium of claim 56 comprising grouping the trades by an auction event, each trade being related as determined by at least one user-selectable criterion.

59. (New) The computer-readable medium of claim 55, where the order book information comprises a proposed transaction price, and the method further comprises displaying at least a subset of said order book information adjacent the first axis aligning the proposed transaction price with a position corresponding to said proposed transaction price on the first axis.